

TOP SECRET

WORKING PAPER 25X

13 February 1970
IEG/MSD-199/70

MEMORANDUM FOR: Executive Director, NPIC

THROUGH: Chief, Imagery Exploitation Group, NPIC R

SUBJECT: Launch Sites 7A and 7B, Launch Complex A,
Sary-Shagan Missile Test Center

REFERENCE: [redacted] dated 3 February 1970

1. We have been watching closely the activity in the area of the old GRIFFON launch sites at launch complex A, Sary-Shagan MTC during the past 17 months. In our opinion, both launch sites 7A and 7B appear to be standard GALOSH launch sites like those at Moscow and at Sary-Shagan launch complex B. However, the vertical erector arms at site 7A are slightly atypical in height, [redacted]. The erector arms at site 7B measure approximately [redacted]. Although the height measurements of 7A and 7B differ, the GALOSH launcher erectors at launch complex B, positions B3 and B4, also differed in height measurements [redacted]. The launcher erector at position B3, which was removed in [redacted] high while the one at B4 measured approximately [redacted]. In addition, height measurements of the launcher erectors at the Moscow ABM complexes vary [redacted]

2. Launch sites 7A and 7B, launch complex A, have the following GALOSH characteristics. a. When observed under construction, both sites had circular excavations with diameters of approximately 30 feet, which is the average width of launcher erector excavations observed at the Moscow complexes and at launch complex B. b. Each launch site has a turntable base for the launcher erector arms. c. Vehicle guide rails for the positioning of a transporter-launcher bisect the base and have dimensions similar to other known GALOSH launch sites. All three features are exhibited at the Moscow complexes and at launch complex B, Sary-Shagan.

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5. A speculative analysis suggests that the two positions are intended for a new missile, possibly combining with the two GALOSH launch sites to form a Spartan-Sprint type system. At present there is no evidence to confirm the construction of ABM radars, although some unidentified construction continues in the area of launch sites 7A and 7B. The nearest TRY ADD radar facility is located 30 nautical miles distant at launch complex B. The former incomplete TRY ADD buildings at launch complex D (50 nm distant) have been undergoing modification since [REDACTED]. The radars previously associated with the GRIFFON launch sites at launch complex A have not been reactivated. The SQUARE PAIR radar near the GALOSH sites was installed 16 months prior to the initial construction of the GALOSH launch sites and does not appear to be cable connected to the launcher erectors at 7A or 7B.

6. IEG/MSD has not ruled out the possibility that the launcher erector at launch site 7A is intended for a missile that may have an endoatmospheric terminal intercept role. However, the height differences of the launcher erectors at 7A and 7B, when compared to the height of the launcher erectors at B3 and B4, launch complex B, Sary-Shagan, are not, we feel, sufficient evidence to establish, at this time, an ABM missile system intended for an endoatmospheric role.

[REDACTED] 25X
Chief, Missiles & Space Division, IEG/NPIC

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TS

3 Feb 70

Ch, IEG -

Re new Galosh launchers
at launch Site 7, Launch Complex A:

- Perhaps I am being too
simple-minded, but methinks
we should watch carefully
for any signs that the Sovs
are developing a smaller or
shorter ABM than the Galosh
as we know it, perhaps for
endospheric, ^{terminal} intercept role.

- The lesser height of the
launchers points in that
direction.

Weekly Surveyor

9 February 1970

DEFENSIVE SYSTEMS

Soviet SA-5 SAM Checkout Facility Identified at Kovylnino:

A checkout facility for SA-5 SAM equipment has been identified at a previously unidentified facility at Kovylnino (54-00N/43-49E). Fourteen Square Pair radars and 146 launchers were seen within the doubly secured area of the facility. There are a number of indications that the facility is for equipment checkout rather than test firing or operational use; 1) the absence of revetments, 2) neat rows of closely spaced equipment, 3) the presence of 15 Square Pair radar and 90 launcher locations, 4) the apparent absence of missiles and 5) the lack of acquisition radars. The Kovylnino checkout facility (145 miles south of Gorkiy) was first noted under construction in [redacted] Facility construction appeared complete in mid-1966, although partial use may have occurred as early as mid-1964. The facility is served by a spur connected with major Soviet rail lines suitable for marshalling at Kovylnino the vans, radars and launchers observed there.

25X1

The facility consists of two parallel concrete strips over 2000 ft in length and separated by more than 2500 ft. Fifteen Square Pair guidance radar positions and associated vans are aligned on one strip and 90 SA-5 launchers are in a double row on the other. The distance between the two is approximately that separating radars and launchers at deployed complexes. Three cable trenches connect the two strips and three calibration towers are located to one side of the facility. The location of these towers is consistent with that of the tower observed at operational complexes. The facility gives the distinct impression of being used to check out the compatibility of launchers and guidance radars and to mutually align and synchronize them. (TS [redacted])

25X1

Even if not excepted the launchers at Launch Site 7 to be
New Launcher at Launch Site 7 Sany Shagan, USSR. Matches
Deployed Galosh ABM Launchers: [redacted] photography has permitted identification of a second Galosh-type launcher under construction at Launch Site 7, Launch Complex A. Other activity in the area indicates that at least one and possibly several additional launchers will be con-

Galosh launchers

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25X1

Weekly Surveyor

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25X1 structured. The first of the launchers observed at this facility was comparable to the Galosh launchers deployed with the Moscow ABM system in almost every respect except height, being about [] as opposed to a nominal Galosh launcher height of about [] (The first launcher of the Galosh-type to be built at Sary Shagan (Launch Complex B) was also about [] (No missiles were ever associated with that launcher and it was dismantled in late 1967, about a year before the emplacement of the first launcher at Site 7.) The possibility exists, therefore, that the Site 7 launcher is the same one that was dismantled at Launch Complex B.)

25X1 The second Galosh-type launcher at Launch Site 7 will be about [] and apparently will closely resemble the deployed Galosh launchers. The high level of construction activity in this area even during the winter months indicates a high Soviet priority for this facility. The appearance of this second launcher strongly suggests that Galosh AMMs will be launched from this location. The relationship of this facility to other ABM-related facilities at Sary Shagan cannot yet be established and the electronics which will be associated with the launchers have not yet been identified. (IAS and DSD Analysis) (TS [])

25X1 Gin Sling Radar Identified at Chinese Island SAM Site:
25X1 Photography of [] clearly shows that the SAM site located on Ssu Chiao Island southeast of Shanghai at 30-42-30N/122-27-50E is equipped with a Gin Sling radar.
25X1 (TS [])

25X1 Comment: This identification, together with [] data obtained during a SAM firing from this site on 1 December 1969, appears to confirm the view that all Gin Sling parameters except its steady-scan mode are the same as the S-band Fan Song B. Gin Sling is the Chinese-produced modified version of the Soviet Fan Song; heretofore, there had been considerable uncertainty as to what modifications the Chinese had made.

Gin Sling is distinguished by -- (1) a small dish antenna above the center of the horizontal trough tracking